

PATENT COOPERATION TREATY

PCTINTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



REC'D 27 JUN 2005

WIPO

PCT

Applicant's or agent's file reference P03P7001/PCT	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/KR2004/001545	International filing date(day/month/year) 25 JUNE 2004 (25.06.2004)	Priority date (day/month/year) 26 JUNE 2003 (26.06.2003)	
International Patent Classification (IPC) or national classification and IPC IPC7 A61B 17/062			
Applicant LEE, EUI TAI et al			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising: <ul style="list-style-type: none"> a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows: <ul style="list-style-type: none"> <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____ containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand 13 DECEMBER 2004 (13.12.2004)	Date of completion of this report 15 JUNE 2005 (15.06.2005)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer LEE, CHUNG HO  Telephone No. 82-42-481-8160

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/001545

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
 - ☒ the international application as originally filed/furnished
 - ☐ the description:
 - pages _____ as originally filed/furnished
 - pages* _____ received by this Authority on _____
 - pages* _____ received by this Authority on _____
 - ☐ the claims:
 - pages _____ as originally filed/furnished
 - pages* _____ as amended (together with any statement) under Article 19
 - pages* _____ received by this Authority on _____
 - pages* _____ received by this Authority on _____
 - ☐ the drawings:
 - pages _____ as originally filed/furnished
 - pages* _____ received by this Authority on _____
 - pages* _____ received by this Authority on _____
 - ☐ the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages _____
 - ☐ the claims, Nos. _____
 - ☐ the drawings, sheets _____
 - ☐ the sequence listing (*specify*): _____
 - ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages _____
 - ☐ the claims, Nos. _____
 - ☐ the drawings, sheets _____
 - ☐ the sequence listing (*specify*): _____
 - ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/001545

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-14	YES
	Claims		NO
Inventive step (IS)	Claims	1-14	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

The following document has been considered for the purpose of this report.

D1 : US 5486196 A1 (MEDCHEM PRODUCTS, INC.) 23 January 1996

1. Novelty

Claim 1 of the present invention concerns a suture assisting and maintaining apparatus using the tension of the suture and comprising a loop suture(130) threaded through skin wound, a tightening member(120) for gathering both ends of the threaded loop suture, a pulling member(140) for pulling the loop suture, a housing member(110) for housing the pulling member and making the loop suture tightened and a locking member(150) for fixing a position of the pulling member.

The closest prior art is given by the document D1. This document discloses(cf. Fig. 1-2, 6-9, abstract, column 5 line 25 - column 6 line 11) an apparatus using the mechanical power of a screw for the closure of wide skin defects by stretching skin consisting of a tension bar(82), a large knob(81), a reversible lock(85), and hooks(23) connected to each leg(20).

While the technical feature of claim 1 of the present invention uses the tension of suture for stretching of a wound, the most closest prior art D1 uses the mechanical force of a screw.

Thus, claim 1 is novel under PCT Article 33(2).

As a consequence, its dependent claims 2-14 are also novel.

(Continued on Supplemental Sheet)

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Box No. V

2. Inventive Step

Claim 1 of the present invention is intended to present a wound closure assisting and maintaining apparatus for maintaining the closure of an open wound. The solution according to claim 1 is a loop suture(130) threaded through skin wound, a tightening member(120) for gathering both ends of the threaded loop suture, a pulling member(140) for pulling the loop suture, a housing member(110) for housing the pulling member and making the loop suture tightened and a locking member(150) for fixing a position of the pulling member.

D1 discloses an apparatus for stretching an open wound and the operation mechanism of the invention D1 is performed by mechanical force of a screw. There can be no inference about using a suture to stretch an wound from D1. Since the structure, operation mechanism and the components of the present invention are not disclosed or suggested in the prior art, claim 1 of the present invention is not considered to be obvious to a person skilled in the art with the knowledge of the prior art.

Thus, the invention in claim 1 is inventive under 33(3) PCT.

As a consequence, its dependent claims 2-14 are also inventive.

3. Industrial applicability

There is no reason for forming a negative opinion about the industrial applicability of this application. Consequently, claims 1-14 appear to meet the requirement of PCT Article 33(4).